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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,988	04/21/2004	Norton Spiel	SPIEL-COMBO-CON 2	6920

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EXAMINER	
HENDERSON, MARK T	

ART UNIT	PAPER NUMBER
3722	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/828,988	SPIEL, NORTON	
	Examiner	Art Unit	
	Mark T. Henderson	3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/21/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED OFFICE ACTION

Faxing of Responses to Office Actions

In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing or responses to Office Actions directly into the Group at (571) 273-8300. This practice may be used for filing papers, which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 9, 14, 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Claim 1 recites the limitations: "the advancement" in line 6; "the temperature" in line 12. There is insufficient antecedent basis for these limitations in the claim.

2. Claim 9 recites the limitation "the placement" in line 10. There is insufficient antecedent basis for this limitation in the claim.

3. Claim 14 recites the limitation "said compartments" in line 4. There is insufficient antecedent basis for this limitation in the claim.

4. Claim 18 recites the limitations: "said plastic spiral coil" in line 3; "the leading edge" in line 9; "the bottom edge" in line 15; "the proximate end" in line 17; "the distance" in line 17; "the internal diameter" in line 22; "the outer diameter" in line 23; "the upper portion in line 26; "the top" in line 27; and "the position" in line 32. There is insufficient antecedent basis for these limitations in the claim.

5. Claim 19 recites the limitations: "the spiral" and "the leading hole" in line 7. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 20 recites the limitation "the direction" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-3, 8, 11, 12, 15-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, and 7 of U.S. Patent No. 6,726,426 (Spiel) in view of Negro (3,688,809) and further in view of EMI Plastics Equipment.

Spiel discloses a process of binding books and combination spiral coil forming and binding machine comprising: forming a plastic coil form a coil forming machine; cutting a plastic coil to a sufficient length for binding a book; advancing the linkage cooling conveyor as a cooler to a coil binding machine compartment at a speed sufficient to cool the plastic coil at ambient air temperature; and binding the book with cooled plastic coil in a binding machine.

However, Spiel does not disclose: incrementally stopping the advancement of a conveyor belt having a plurality of compartments; ejecting the plastic coil onto one compartment located on the conveyor belt; advancing the conveyor belt to another compartment of the plurality of compartments; and comprising a drive motor to move cooling conveyor.

Negro discloses a process for binding books comprising cutting the plastic coil, incrementally stopping the advancement of a conveyor, and ejecting the plastic coil onto one compartment (39 as stated in Col. 3, lines 32-34 and Col. 5, lines 58-65); advancing the conveyor to a subsequent another compartment (Col. 5, lines 60-64) to provide cooling of coils.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Spiel's binding process with a process of stopping the advancement of a conveyor belt, ejecting plastic coil into a compartment, and then advancing to another compartment as taught by Negro for providing a process in which coils are used on a as needed basis.

However, Spiel as modified by Negro does not disclose wherein the conveyor is a conveyor belt.

EMI Plastic Equipment discloses wherein the conveyor comprises a conveyor belt driven by a drive motor.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Spiel's and Negro's binding process with a conveyor comprising a conveyor belt driven by a drive motor as taught by EMI for providing a conveying means in which to transfer hot objects from one point to another while cooling.

8. Claims 2, 3, 8-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1, 3-13 of U.S. Patent No. 6,547,502. Although the conflicting claims are not identical, they are not patentably distinct from each other because both disclose a spiral coil forming and binding machine comprising: a coil forming machine; a cooler or cooling means for cooling the coils at ambient air temperature, a binding machine; wherein the cooler comprises a linkage cooling conveyor with a drive motor; wherein the drive motor is either a DC direct current gearmotor, an AC alternating current gearmotor, or a

stepping motor; a means for clamping together a sheaf of paper; a stationary base having a slidable block mounted thereon the base; a feeding conveyor means; a spring means; means for adjusting the position of the block; and a means for spreading apart the block.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 2 and 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Pfaffle (4,249,278).

Pfaffle discloses in Fig. 1, a spiral coil forming and binding machine comprising: a coil forming machine (11) forming hot binding coils at a high temperature (Col. 2, lines 64-68 and Col. 3, lines 1 and 2), a cooler (45) cooling or refrigerating the coils to a solid state (Col. 3, lines 5-9) by a pressurized blasts of compressed air (Col. 3, lines 15-17) and exposure to a cooling chamber 952); a binding machine (76) for binding the coils into holes of a book (Col. 3, lines 49-59), and wherein the cooler comprises a linkage conveyor (24, as stated in Col. 4, lines 4-7).

In regards to Claims 6, wherein the process of having the coils cooled by exposure to cooling chambers cooled by Freon filled conduits, the patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or

obvious from a product of the prior art, the claim is unpatentable even though the prior art was made by a different process. Therefore, the process of cooling the coils can be done by any desired process.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Negro.

Negro discloses in Fig. 1, a binding process comprising: cutting the plastic coil, incrementally stopping the advancement of a conveyor, and ejecting the plastic coil onto one compartment (39 as stated in Col. 3, lines 32-34 and Col. 5, lines 58-65); advancing the conveyor to a subsequent another compartment (Col. 5, lines 60-64); and binding of a stack of sheets into a book.

However, Negro does not disclose wherein the conveyor is a conveyor belt.

EMI Plastic Equipment discloses wherein the conveyor comprises a conveyor belt driven by a drive motor.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Negro's binding process with a conveyor comprising a conveyor belt driven by a drive motor as taught by EMI for providing an alternative conveying means.

In regards to wherein the conveyor speed is sufficient for the temperature of a plastic coil to lower, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. Therefore, the speed of the conveyor can be set ay any desirable speed to lower the temperature of a coil.

11. Claims 3, 10-12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfaffle (4,249,278) in view of EMI.

Pfaffle discloses a combination plastic spiral coil forming and binding machine having all the elements as claimed in Claims 2 and 8, and as set forth above. Pfaffle also discloses a means (Col. 2, lines 37-45) for taking the plastic thread (33) from a spool (34), a means (Col. 4, lines 3-11) for advancing and winding the thread on a mandrel (24), a discharge element (mandrel 24) discharging the plastic thread in free air (by rotation of mandrel), a cutter cutting (78) the coil, and a driving motor (63) moving the linkage conveyor.

However, Pfaffle does not disclose: that the closed are cooled down at ambient temperature.

EMI Plastic Equipment discloses wherein the conveyor comprises a conveyor belt driven by a drive motor.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Pfaffle's coil forming and binding combination with a conveyor comprising a conveyor belt driven by a drive motor to cool parts to an ambient temperature as taught by EMI for providing an conveying means to slowly cool hot parts.

In regards to **Claims 15-17**, it would have been obvious to provide any type of drive motor, since applicant has not disclosed that a particular type of drive motor solves any stated problem or is for any particular purpose and it appears that the invention would perform equally as well with any type of drive motor such as a variable drive motor provided by EMI.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pfaffle, Spiel ('502), Hans Biel, and Spiel ('426) disclose a coil forming and binding device. Okada et al and EMI disclose a cooler means.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark T. Henderson whose telephone number is (571) 272-4477, and informal fax number is (571) 273-4477. The examiner can be reached on Monday-Friday from 9:00AM to 3:45PM. If attempts to reach the examiner by telephone are unsuccessful, the Examiner Supervisor, Boyer Ashley, can be reached at (571) 272-4502. The formal fax number for TC 3700 is (571) 273-8300.

MTH

September 5, 2005

BOYER D. ASHLEY
PRIMARY EXAMINER